

5. Marine Fauna from the Kerimba Archipelago, Portuguese East Africa, collected by Jas. J. Simpson, M.A., B.Sc., and R. N. Rudmose-Brown, B.Sc., University of Aberdeen: MADREPORARIA. By RUTH M. HARRISON and MARGARET POOLE\*.

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This Collection was made between September 1907 and May 1908, and contains two species of Turbinolidæ, four species of Fungiidæ, four species of Astræidæ and one species of Eupsammiidæ.

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Family TURBINOLIDÆ Milne-Edwards & Haime.

By MARGARET POOLE.

Genus HETEROCYATHUS Milne-Edwards & Haime.

HETEROCYATHUS EQUICOSTATUS Milne-Edwards & Haime [19].

This species has been fully described by me in the account of the Turbinolidæ from the Mergui Archipelago, Lower Burma. It contains three well-defined types differing from each other in the number and characters of the septa and pali, the general shape of the corallum, the depth and size of the calicular fossa and the position of the lateral pores. All three varieties are, however, connected by beautifully intermediate forms, as is shown in a photograph in the paper referred to above.

The collection contains ten specimens, of which four belong to type II. and six to type III.; the first type being unrepresented.

*Localities.*—Station I. Tunghi Bay. Bottom: sand, mud, and shell. Depth: 5-18 fathoms. 2 specimens of type II. and 4 of type III.—Station VI. Kero-Nyuni Bay. Bottom: sand. Depth: 5-10 fathoms. 2 specimens of type II. and 2 of type III.

Genus PARACYATHUS Milne-Edwards & Haime.

PARACYATHUS CAVATUS Alcock [1].

There is a single small and very irregular colony of five calices, which with much hesitation I identify as the above species. The whole measures 24 × 18 mm. and 14 mm. in height from the broad encrusting base. The largest calice measures 11 × 9 mm. and 2 mm. in depth.

This is a new species established by Alcock, which he says is very near the fossil form *Paracyathus crassus* of Milne-Edwards and Haime.

*Locality.*—Station II. Maiyapa Bay. Bottom: sand, mud, and coral. Depth: 10 fathoms.

\* Communicated by Prof. G. C. BOURNE, D.Sc., F.Z.S.

## Family FUNGIIDÆ (Milne-Edwards &amp; Haime).

## Genus FUNGIA Lamarck.

## FUNGIA PATELLA Milne-Edwards [21, 22].

This is the *F. patella Cycloseris*-form of Döderlein [7, pl. i.], and is identical with the figures given by Gardner of *Cycloseris hexagonalis* [14, pl. xx.], which species the latter writer in his recently published report of the Percy Sladen Trust Expedition to the Indian Ocean [18] has absorbed into *F. patella*. The East African specimens entirely justify his abolition of the species *Cycloseris hexagonalis*.

There are eight specimens measuring from 26 × 25 mm. to 56 × 55 mm. The younger specimens show a well-defined scar of attachment.

6 specimens are from Station VI. Kero-Nyuni. Bottom: sand. Depth: 5-10 fathoms. And 2 from Station XIII. Pemba Bay. Bottom: muddy. Depth: 10-20 fathoms.

## FUNGIA CYCLOLITES Lamarck.

*Cycloseris cyclolites* of Milne-Edwards [22] and Gardiner [13] has recently been abolished by the latter, and Wayland Vaughan [30], the characters by which it was originally distinguished from the genus *Fungia* having proved to be of nothing more than specific value.

There is one specimen from Station VI. Kero-Nyuni. Bottom: sand. Depth: 5-10 fathoms. Measuring 62 × 53 mm.

The scar of attachment is entirely obliterated.

## FUNGIA FUNGITES Linn., var. AGARICIFORMIS Döderlein [7].

There are four young specimens of irregular shape and with well-marked scars of attachment.

*Locality*.—Station II. Maiyapa Bay. Bottom: sand, mud, and coral. Depth: 10 fathoms.

## Genus DIASERIS Milne-Edwards &amp; Haime.

## DIASERIS DISTORTA Michelin.

Two complete specimens and some fragments.

In the account of the corals from the Mergui Archipelago mentioned above, I have shown that more evidence is necessary before the genus *Diaseris* can be absorbed by the genus *Fungia*, and have had photographed for comparison a specimen of *D. distorta* with two segments, and one of *Fungia cyclolites* which has been broken and repaired, to show the difference in the arrangement of the septa.

*Locality*.—Station I. Tunghi Bay. Bottom: sand, mud, and shell. Depth: 5-18 fathoms.

## Family ASTRÆIDÆ Dana.

## Genus TRACHYPHYLLIA Milne-Edwards &amp; Haime.

## TRACHYPHYLLIA AMARANTUM Milne-Edwards &amp; Haime [22].

There are twelve young solitary specimens having calices from  $17 \times 13$  to  $46 \times 26$  mm., coralla from 10 to 38 mm. in height.

There are also seven older specimens undergoing fissiparity into two or four parts. These have calices of  $80 \times 48$  mm., and the coralla are 58 mm. in height.

*Localities*.—Station I. Tunghi Bay. Bottom: sand, mud, and shell. Depth: 5–18 fathoms. 1 adult specimen.—Station III. Mtundo Bay. Bottom: sand, shell, and coral. Depth: 6 fathoms. 5 young specimens.—Station VI. Kero-Nyuni. Bottom: sand. Depth: 5–10 fathoms. 4 young specimens.—Station XI. Mangoroshi Point. Reefs. 2 young specimens.—Station XIII. Pemba Bay. Bottom: muddy. Depth: 10–20 fathoms. 1 very young specimen. Locality of the remaining 6 dead adult specimens is unrecorded.

## Genus MUSSA Oken, Milne-Edwards &amp; Haime.

## MUSSA CRISTATA Milne-Edwards [22].

The collection contains only a small dead colony, consisting of one isolated and five united calices. The whole colony measures about  $120 \times 90$  mm. and rises to a height of 80 mm. The separated calice measures  $45 \times 35$  mm.

This species apparently differs from *M. distans* of Klunzinger [17] only in possessing an incomplete fifth cycle of septa, a character which seems insufficient for the establishment of a new species.

*Locality* unrecorded.

## Genus FAVIA Oken, Milne-Edwards &amp; Haime.

## FAVIA OKENI Milne-Edwards &amp; Haime [22].

*Parastrea radiata* Milne-Edwards & Haime.

The collection contains a single almost circular colony of nine distinct calices, measuring 25 mm. in diameter and rising to a height of 17 mm. Klunzinger (17, t. iii. fig. 4) gives a photograph of this species under the name of *F. cavernosa* Forskål.

*Locality* unrecorded.

## Genus GYROSMILIA Milne-Edwards &amp; Haime.

## GYROSMILIA INTERRUPTA Milne-Edwards &amp; Haime [22].

There is a circular and smoothly convex colony of this species, measuring 90 mm. in diameter, and reaching a height of 60 mm. at the centre of the colony. The under surface is covered by a

thin radially-striated epitheca, and is attached to the substratum in the middle by an irregular, short peduncle. Klunzinger also gives an excellent photograph of this species (17, t. i. fig. 8).

*Locality* unrecorded.

Family EUPSAMMIDÆ Bourne [5].

By RUTH M. HARRISON.

Genus HETEROPSAMMIA Milne-Edwards & Haime.

HETEROPSAMMIA MICHELINI Milne-Edwards & Haime [20].

There are three specimens, of which one has two incompletely separated calices, and both the others each two distinct individuals.

*Localities*.—Station III. Mtundo Bay. Bottom: sand, shell, and coral. Depth: 6 fathoms. 2 specimens.—Station VI. Kero-Nyuni. Bottom: sand. Depth: 5–10 fathoms. 1 specimen.

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